

Policies and Procedures **Pharmacy Services for** Nursing Facilities

Section II - Medication Administration

PREPARATION AND GENERAL GUIDELINES

IIA1: EQUIPMENT AND SUPPLIES FOR ADMINISTERING MEDICATIONS

Policy

The facility maintains equipment and supplies necessary for the preparation and administration of medications to residents.

Procedures

- A. The following equipment and supplies are acquired and maintained by the facility for the proper storage, preparation, and administration of medications:
 - 1) Lockable medication carts, cabinets, drawers, and/or rooms with well-lit medication preparation areas.
 - 2) A refrigerator and freezer with a thermometer for each section.
 - 3) Thermometers for reading room (non-air-conditioned) and controlled room (air-conditioned) temperatures. A temperature log with acceptable temperature ranges for each area should be maintained at all times.
 - 4) Space for medication preparation with access to a convenient water source.
 - 5) Oral syringes, parenteral syringes, needles, droppers, soufflé cups, water pitchers, drinking cups, applesauce/pudding, calibrated plastic medication cups, clean tissue, cotton balls, alcohol wipes, lubricant (for rectal and vaginal administration), labels for date opened/date expires, discontinued and other applicable procedures.
 - 6) Devices for crushing and splitting tablets.
 - 7) Examination gloves.
 - 8) Facility-approved hand sanitizer (securely stored so that residents cannot accidentally ingest large quantities).
 - 9) Small-volume nebulizer for administration of inhaled medications.
 - 10) Disposal containers for medications, sharps, and bio-hazardous waste generated during medication administration.
- B. The charge nurse on duty ensures that equipment and supplies relating to medication administration are clean and orderly.
- C. The consultant pharmacist monitors medication storage conditions on a quarterly basis and reports any irregularities and recommendations for improvement to the appropriate facility staff member.
- D. The charge nurse is notified if supplies are inadequate or equipment fails to work properly. The charge nurse reports equipment and supply deficiencies to the director of nursing.
- E. If carts are furnished by the provider pharmacy, the pharmacy promptly repairs or replaces nonfunctional carts. If carts belong to the facility, the cart manufacturer or distributor is notified for prompt repair or replacement if a problem with a medication cart occurs.

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IIA2: MEDICATION ADMINISTRATION-GENERAL GUIDELINES

Policy

Medications are administered as prescribed in accordance with good nursing principles and practices and only by persons legally authorized to do so. Personnel authorized to administer medications do so only after they have been properly oriented to the medication management system in the facility. The facility has sufficient staff and a medication distribution system to ensure safe administration of medications without unnecessary interruptions.

Procedures

A. Preparation

- 1) Medications are prepared only by licensed nursing, medical, pharmacy or other personnel authorized by state laws and regulations to prepare medications.
- 2) Hand washing and Hand Sanitization: The person administering medications adheres to good hand hygiene, which includes washing hands thoroughly before beginning a medication pass, prior to handling any medication, after coming into direct contact with a resident, and before and after administration of ophthalmic, topical, vaginal, rectal, and parenteral preparations and medications given via enteral tubes. Examination gloves are worn when necessary (refer to specific administration procedures for each route in Sections IIA and IIB of this manual). Hand sanitization is done with an approved sanitizer between hand washings, when returning to the medication cart or preparation area (assuming hands have not touched a resident or potentially contaminated surface). Sanitization can be done at regular intervals during the medication pass such as after each room, again assuming hand washing is not indicated. Sanitization is not a substitute for proper hand washing, and washing should be done if there is any question.
- 3) An adequate supply of disposable containers and equipment (See IIA1: EQUIPMENT AND SUPPLIES FOR ADMINISTERING MEDICATIONS) is maintained on the medication cart for the administration of medications. Disposable containers are never reused.
- 4) FIVE RIGHTS – Right resident, right drug, right dose, right route and right time, are applied for each medication being administered. A triple check of these 5 Rights is recommended at three steps in the process of preparation of a medication for administration: (1) when the medication is selected, (2) when the dose is removed from the container, and finally (3) just after the dose is prepared and the medication put away.
 - a. Check #1: Select the Medication – label, container and contents are checked for integrity, and compared against the medication administration record (MAR) by reviewing the 5 Rights.
 - b. Check #2: Prepare the dose – the dose is removed from the container and verified against the label and the MAR by reviewing the 5 Rights.
 - c. Check #3: Complete the preparation of the dose and re-verify the label against the MAR by reviewing the 5 Rights.

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- 5) Prior to administration, the medication and dosage schedule on the resident's medication administration record (MAR) are compared with the medication label. If the label and MAR are different and the container is not flagged indicating a change in directions or if there is any other reason to question the dosage or directions, the physician's orders are checked for the correct dosage schedule.
- 6) Tablet Splitting: If breaking tablets is necessary to administer the proper dose, hands are washed with soap and water or alcohol gel and gloves are worn prior to handling tablets. Gloves must be worn if the tablet requires special handling. The following guidelines are followed:
 - a. A tablet-splitter is used to ensure accuracy and to minimize contact with the tablet. The splitter blade and surface contacting tablet are cleaned before and after each use.
 - b. If the tablet is scored, every attempt is made to break along score lines.
 - c. If using only one-half of the tablet from a unit-dose package, the remainder is disposed of according to facility procedure (See IE5: MEDICATION DESTRUCTION). If in a vial, the 1/2 tablet is returned to the original vial, if allowed by applicable law.
 - d. Since un-scored tablets may not be accurately broken, their use is discouraged if a suitable alternative is available (such as liquid or half-strength tablet).
 - e. Where possible, the provider pharmacy is requested to package half tablets or the prescriber is contacted for an alternative dosage form (e.g., liquid) or therapeutic equivalent that does not require splitting.
- 7) Tablet Crushing/Capsule Opening: Crushing tablets may require a physician's order, per facility policy. If it is safe to do so, medication tablets may be crushed or capsules emptied out when a resident has difficulty swallowing or is tube-fed, using the following guidelines.
 - a. Long-acting or enteric-coated dosage forms should not be crushed; an alternative should be sought. Some long-acting capsules can be opened and administered (without crushing contents). Gloving is recommended to protect the nurse from exposure to contents of the capsule. Check with pharmacist before opening any capsules.
 - b. Each medication preparation area includes a device that is specifically used for crushing medications.
 - c. Medications are crushed between two soufflé cups or using a comparable device to prevent contact between the medication and the crushing device. If contact occurs, the crushing device is to be properly cleaned prior to further use.
 - d. Medication should be crushed and administered individually if administered via tube. If administered in applesauce or other vehicle, they may be combined.
 - e. For residents able to swallow or who have difficulty swallowing, tablets which can be appropriately crushed may be ground coarsely and mixed with the appropriate vehicle such as applesauce so that the resident receives the entire dose ordered. Please consult with the product literature or "Do Not Crush" lists or with the pharmacist if there is a question about medications to be crushed.
 - f. Water should be offered to help remove any bitter taste that may not be masked by the applesauce or other vehicle.
 - g. If the resident is tube-fed, medications are crushed finely to prevent clogging the tube.

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- h. The need for crushing medications is indicated on the resident's orders and the MAR so that all personnel administering medications are aware of this need and the consultant pharmacist can advise on safety issues and alternatives, if appropriate, during medication regimen reviews.
- 8) Liquid dosage forms may be a practical alternative in place of solid tablets, especially if tablets have a coating and will not crush finely. The nurse checks with the provider pharmacy to determine if a liquid form is available and covered by the applicable payment program. The physician is contacted for a new order before changing the dosage form.
- 9) When administering high-risk medications in liquid form or those requiring precise measurement, such as digoxin or morphine, devices provided by the manufacturer or obtained from the provider pharmacy, (e.g., oral syringes) are used to allow accurate measurement of doses. Any dose under 5 mL should not be measured in a measuring cup. Additionally, the facility may elect to have 2 nurses check the dose of high risk medications.
- 10) When administering as needed (PRN) medications at times other than the medication pass, the dose may be prepared in the medication cart storage area and taken to the resident's bedside, leaving the cart locked and secured.
- 11) If a medication with a current, active order cannot be located in the medication cart/drawer, other areas of the medication cart, medication room, and facility (e.g., other units) are searched, if possible. If the medication cannot be located after further investigation, the pharmacy is contacted or medication removed from the stat box/emergency kit.

B. Administration

- 1) Medications are administered only by licensed nursing, medical, pharmacy or other personnel authorized by state laws and regulations to administer medications.
- 2) Medications are administered in accordance with written orders of the prescriber.
- 3) If a dose seems excessive considering the resident's age and condition, or a medication order seems to be unrelated to the resident's current diagnoses or conditions, the nurse calls the provider pharmacy for clarification prior to the administration of the medication or if necessary contacts the prescriber for clarification. This interaction with the pharmacy and/or prescriber and the resulting order clarification are documented in the nursing notes and elsewhere in the medical record as appropriate.
- 4) When medications are administered by mobile cart taken to the resident's location (room, dining area, etc.) medications are administered at the time they are prepared. Medications are not pre-poured.
- 5) When medications are administered from a central location, such as the medication room, medications for the immediate administration time may be prepared not more than 60 minutes in advance for all residents, or per applicable state law or regulation. In no case shall more than one dose time be prepared in advance.
- 6) Medications are administered without unnecessary interruptions.
- 7) The person who prepares the dose for administration is the person who administers the dose.
- 8) Residents are identified before medication is administered. Methods of identification include:

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- a. Checking photograph attached to medical record.
 - b. Calling resident by name (except in residents with cognitive impairment).
 - c. Having the resident verify his/her last name.
 - d. Verifying ID bracelet, if appropriate.
 - e. If necessary, verifying resident identification with other facility personnel.
- 9) Hands are washed before putting on examination gloves and upon removal for administration of topical, ophthalmic, injectable, enteral, rectal, and vaginal medications.^{1,2}
 - 10) At least 4 ounces of water or other acceptable liquid are given with oral medications. More liquids may be necessary when administering certain medications (e.g., bisphosphonates for osteoporosis). Check with the manufacturer's recommendations or pharmacist if unsure.
 - 11) A schedule of routine dose administration times is established by the facility and utilized on the administration records.
 - 12) Medications are administered between one (1) hour before and one (1) hour after scheduled time, except before, with or after meal orders, which are administered based on mealtimes. Unless otherwise specified by the prescriber, routine medications are administered according to the established medication administration schedule for the facility.
 - 13) Medications designed to be administered over a 24-hour period (ex: sustained-release) are scheduled accordingly. In these cases, an order for twice daily, for example, shall be interpreted as every 12 hours.
 - 14) Residents are allowed to self-administer medications when specifically authorized by the attending physician and in accordance with procedures for self-administration of medications.
 - 15) Medications supplied for one resident are never administered to another resident.
 - 16) During administration of medications, the medication cart is kept closed and locked when out of sight of the medication nurse or aide. No medications are kept on top of the cart. The cart must be clearly visible to the personnel administering medications, and all outward sides must be inaccessible to residents or others passing by. In addition, privacy is maintained at all times for all resident information (e.g., MAR) by closing the MAR book/covering the MAR sheet or computer screen when not in use.
 - 17) For residents not in their rooms or otherwise unavailable to receive medication on the pass, the MAR is "flagged". After completing the medication pass, the nurse returns to the missed resident to administer the medication.
 - 18) The resident is always observed after administration to ensure that the dose was completely ingested. If only a partial dose is ingested, this is noted on the MAR, and action is taken as appropriate.
 - 19) Monitoring of side effects or medication-related problems occurs continually, but particularly after medication administration and especially after the first few doses of a new medication.

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C. Refusals of Medication

- 1) Residents may actively refuse medications. Refusals may also be through “cheeking” or “pocketing” of pills in the mouth. To detect this, the nurse should observe the resident take and swallow the medication. To check, the nurse can offer additional water. Additionally, the nurse can inspect the mouth. This inspection should include an assessment for possible dry mouth which can result from the effects of other medications that the resident may be taking. Dry mouth can cause the medication to stick to the inside of the mouth.
- 2) Residents may cheek and discard medications for a number of reasons including having to take too many medications at one time, the administration time is inconvenient, feelings that the medications are not vital or ineffective, or side effects are unpleasant. Nursing should investigate these and other potential reasons for refusal or cheeking.
- 3) A swallowing assessment may be appropriate if the nurse suspects the resident is having difficulty swallowing and cheeking medications as a result.
- 4) In no case is it acceptable to crush and otherwise hide medications in food in an attempt to manage refusals.
- 5) Medication refusal must be reported to the prescriber after an appropriate number of doses are refused and there must be documentation of prescriber notification of such.

D. Documentation (including electronic)

- 1) The individual who administers the medication dose records the administration on the resident’s MAR directly after the medication is given. At the end of each medication pass, the person administering the medications reviews the MAR to ensure necessary doses were administered and documented. In no case should the individual who administered the medications report off-duty without first recording the administration of any medications.
- 2) Current medications, except topicals used for treatments, are listed on the medication administration record (MAR), unless otherwise requested by the facility.
- 3) Topical medications used in treatments, and other treatment preparations are listed on the treatment administration record (TAR).
- 4) The resident’s MAR is initialed by the person administering the medication, in the space provided under the date, and on the line for that specific medication dose administration. Initials on each MAR are cross referenced to a full signature in the space provided, or on an appropriate signature sheet.
- 5) When PRN medications are administered, the following documentation is provided:
 - a. Date and time of administration, dose, route of administration (if other than oral), and, if applicable, the injection/patch site.
 - b. Complaints or symptoms for which the medication was given.
 - c. Results achieved from giving the dose and the time results were noted.
 - d. Signature or initials of person recording administration and signature or initials of person recording effects, if different from the person administering the medication.

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- 6) If a dose of regularly scheduled medication is withheld, refused, not available, or given at a time other than the scheduled time (e.g. the resident is not in the facility at scheduled dose time, or a starter dose of antibiotic is needed), the space provided on the front of the MAR for that dosage administration is initialed and circled. An explanatory note is entered on the reverse side of the record. If several consecutive doses of a vital medication are withheld, refused, or not available the physician is notified. Nursing documents the notification and physician response.
- 7) If an electronic MAR system is used, specific procedures required for resident identification, identifying medications due at specific times, and documentation of administration, refusal, holding of doses, and dosing parameters such as vital signs and lab values are described in the system's user manual. These procedures should be followed, and may differ slightly from the procedures for using paper MARs. Electronic systems also describe procedures for secure access, maintaining privacy of resident information, and for and electronic signatures. Maintenance and support procedures for these systems are described in the system user manuals. Procedures will vary between the various electronic systems available.

References

¹Section 483.65, F-441, of the Centers for Medicare & Medicaid (CMS) Guidance to Surveyors for LTC Facilities states, "Hand hygiene should occur before and after putting on sterile gloves and after taking off all gloves during all resident care that requires the use of gloves. This includes...Medication administration (e.g., eye drops, sublinguals, and injections)..."

²Centers for Disease Control and Prevention (CDC). (2002). Guideline for hand hygiene in health-care settings: recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. MMWR 2002; 51 (No.RR-16).

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IIA3: VIALS AND AMPULES OF INJECTABLE MEDICATIONS

Policy

Vials and ampules of injectable medications are used in accordance with the manufacturer's recommendations or the provider pharmacy's directions for storage, use, and disposal.

Procedures

- A. Vials and ampules dispensed by the pharmacy are maintained in the box or container, with the pharmacy label, in which they are dispensed.
- B. The date opened and the initials of the first person to use the vial are recorded on multi-dose vials on the vial label or an accessory label affixed for that purpose. These labels are not required on single-use vials or ampules.
- C. Ampules and single-use vials (containing no preservative) are discarded immediately after use.
- D. The solution in multidose vials (MDV) is inspected prior to each use for unusual cloudiness, precipitation, or foreign bodies. The rubber stopper is inspected for deterioration. If a MDV is opened and does not indicate the date opened, the date opened reverts to the date of dispensing on the container, and the use period determined from that date. If the dispensing date cannot be determined, the product should not be used and should be discarded according to the facility's policy.
- E. Filter needles must be used when withdrawing medication from ampules. These can be obtained from the pharmacy, or stock supply if appropriate.
- F. If an unused/unopened multidose vial shows visible evidence of precipitation or contamination or the rubber stopper is deteriorating, it is not used, and it is returned to the provider pharmacy. A replacement vial is ordered from the provider pharmacy. The provider pharmacy determines the need for reporting a defective solution to the manufacturer and/or filing a Drug Product Problem Report with the Food and Drug Administration MedWatch program (See Appendices 21 and 22: FDA MEDWATCH REPORT FORMS).
- G. Medication in multidose vials may be used until the manufacturer's expiration date if inspection reveals no problems during that time and they are properly stored prior to opening. USP <797> guidelines recommend discarding multi-dose vials (other than some insulins) at 28 days after they are opened.

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IIA4: INFUSION THERAPY PRODUCTS – GENERAL INFORMATION

Policy

Infusion therapy products are safely and accurately administered by an authorized nurse using a method approved by the Quality Assessment and Assurance Committee or other designated committee.

Procedures

- A. Current reference materials for infusion therapy are available in the facility. Please refer to the Infusion Therapy Policy and Procedure Manual for specifics.

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IIA5: RECONSTITUTION OF MEDICATION FOR PARENTERAL ADMINISTRATION

Policy

To provide for the safe and accurate reconstitution of parenteral medications prior to administration, manufacturer information is reviewed and aseptic technique is observed.

Procedures

- A. Read medication package literature, medication label, or other appropriate reference to determine the correct diluent and quantity of diluent to be used.
 - 1) Note any special steps required (such as shaking).
- B. Wash hands thoroughly.
- C. Break and remove seal from vial of medication.
- D. Break and remove seal from both diluent and medication vials and wipe rubber stoppers with alcohol swab.
- E. Inject into diluent bottle with syringe an amount of air equal to the amount of fluid to be withdrawn for reconstitution of medication.
 - 1) Do not allow needle to touch any surface other than stopper.
- F. Withdraw the appropriate amount of diluent into syringe.
- G. Inject diluent into medication vial slowly and observe resulting solution or suspension for clarity, unusual color, or large particles, such as precipitation. Follow manufacturer's instructions for completing the dissolution (shaking sharply or gently, waiting period for dissolving powder, color changes to note, etc.) If there appears to be a problem, do not administer medication without consulting pharmacist for further information.
- H. Administer medication or add to intravenous (IV) solution as directed and complete documentation.
- I. Discard unused medication and diluent according to facility disposal policy

Refer to the Infusion Therapy Policy and Procedure Manual for further guidance

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IIA6: PREPARATION OF EMERGENCY OR SHORT-STABILITY INFUSION THERAPY PRODUCTS

Policy

Infusion therapy products are prepared and delivered by the pharmacy except in emergencies or when product stability precludes preparation in the pharmacy. Infusion therapy products are prepared in the facility only by a registered nurse who has been trained on infusion therapy preparation and who follows infection control measures.

Procedures

- A. The pharmacy notifies the charge nurse about any infusion therapy product that will not be admixed in the pharmacy, but will require admixing by nursing at the time of administration.
- B. Such notification is documented and the need for a nurse to prepare the admixture is indicated on the infusion therapy record and on the care plan.
- C. The pharmacy supplies complete preparation and handling instructions along with the products to be mixed, and a label to be completed and affixed to the infusion therapy product container (See IC10: MEDICATION LABELS). Label should also include the time of infusion therapy product preparation.
- D. Date and time of preparation of the infusion therapy product is documented in the resident's medical record as well as the time that the infusion was started.
- E. Infusion therapy products are prepared in accordance with infection control standards and manufacturer's recommendations.
- F. The area in which infusion therapy supplies and products are stored and prepared for use is kept clean and free of clutter.

Refer to the Infusion Therapy Policy and Procedure Manual for further guidance

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IIA7: CONTROLLED SUBSTANCES

Policy

Medications included in the Drug Enforcement Administration (DEA) classification as controlled substances are subject to special handling, storage, disposal, and recordkeeping in the facility, in accordance with federal and state laws and regulations.

Procedures

- A. The Director of Nursing and the consultant pharmacist in collaboration maintain the facility's compliance with federal and state laws and regulations in the handling of controlled medications. Only authorized licensed nursing and pharmacy personnel have access to controlled medications.
- B. All controlled substances, CII-V are stored and maintained in a locked cabinet or compartment.
- C. Preparation of the dosage form occurs according to the medication administration policy.
- D. Accurate accountability of the inventory of all controlled drugs is maintained at all times. When a controlled substance is administered, the licensed nurse administering the medication immediately enters the following information on the accountability record and the medication administration record (MAR):
 - 1) Date and time of administration. (MAR, Accountability Record).
 - 2) Amount administered. (Accountability Record).
 - 3) Remaining quantity. (Accountability Record).
 - 4) Initials of the nurse administering the dose, completed after the medication is actually administered. (MAR, Accountability Record).
- E. When a dose of a controlled medication is removed from the container for administration but refused by the resident or not given for any reason, it is not placed back in the container. It must be destroyed according to facility policy and the disposal documented on the accountability record on the line representing that dose. The same process applies to the disposal of unused partial tablets and unused portions of single dose ampules. This does not apply to controlled drugs packaged in unit-dose containers that are unopened (vials, ampules, patches).
- F. All controlled medications are reordered when a minimum five-day supply remains to allow time for acquisition and transmittal of the required original written prescription to the provider pharmacy, if necessary.

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IIA8: IRRIGATION SOLUTIONS

Policy

Irrigation solutions are used in accordance with label directions for storage, use, and disposal. Aseptic technique is used in the handling and application of irrigation solutions.

Procedures

- A. Irrigation solutions are labeled with the date and time immediately upon opening.
- B. Solutions prepared by the pharmacy, if unopened, are disposed of by the expiration date indicated. Solutions without an expiration date are not accepted. Solutions prepared by the pharmacy are discarded within seventy two (72) hours after opening.
- C. Solutions prepared in the facility (such as Neosporin G.U., hydrogen peroxide solutions) are disposed of within twenty four (24) hours.
- D. Solutions without preservatives, in the original manufacturer's container (such as water, acetic acid and sodium chloride for irrigation), are disposed of within twenty four (24) hours after opening.
- E. Aseptic/sterile technique is used in the handling and application of irrigation solutions.
- F. When expired, unused solutions are poured down the drain. It is not necessary to record disposal of partial containers.

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IIA9: GENERAL GUIDELINES FOR ADMINISTERING MEDICATION VIA ENTERAL TUBE

Policy

The facility assures the safe and effective administration of enteral formulas and medications via enteral tubes. Selection of enteral formulas, routes and methods of administration, and the decision to administer medications via enteral tubes are based on nursing assessment of the resident's condition, in consultation with the physician, dietitian, and consultant pharmacist.

Procedures

- A. Enteral formulas, equipment, route of administration, and flow rate are selected based on an assessment of the resident's condition and need.
- B. Interactions between medications and feeding formulas (e.g., phenytoin), and interactions of multiple medications, are considered before administering medications through the enteral tube. If necessary, information is obtained from the provider pharmacy or consultant pharmacist.
- C. In-service training on bacteriological safety, administration, and monitoring of enteral solutions and medications via the enteral tube is provided by the facility to nursing personnel.
- D. The manufacturer's written recommendations regarding suggested time period for hanging of the product are consulted when determining the schedule for enteral feeding administration.
- E. When new medication orders are received from the prescriber, the intended route of administration, "via enteral tube", is also obtained. The pharmacy is informed that the resident is receiving medications through the enteral tube, and orders for medications are transmitted with the route of administration being an enteral tube. Medications for enteral administration are obtained in easily pulverized or liquid form if possible. The pharmacy is consulted to determine the best method for preparing dosage forms for enteral tube administration when liquid formulations are not available. If alternative medications or dosage forms are deemed necessary, the prescriber is contacted for a new order.
- F. Enteral tubes are flushed with at least 30 mL¹ of water before administering medications and after all medications have been administered. Drinking water can be used, sterile water for irrigation is preferred.^{2,3}
- G. Prior to crushing tablets for administration through the enteral tube, the nurse must consult the medication crushing guidelines to determine if the tablet can be crushed.
 - 1) Crushed medications may be mixed together, diluted with sufficient water, and administered together so long as no incompatibilities exist. The enteral tube is still flushed with at least 30ml of water before and after administering the group of medications.¹
- H. The pharmacy or consultant pharmacist is consulted when changing to a different formulation or when initiating enteral therapy for necessary dose scheduling adjustments of the medications or feeding schedule adjustments.

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- 1) If on continuous feeding, it may be necessary to change to intermittent feeding or pause the feeding prior to medication administration to avoid an interaction between enteral solutions and some medications.
 - 2) If on intermittent feeding, it may be necessary to delay feeding up to two hours to avoid a medication interaction with enteral solutions.
- I. Medications that are GI irritants (such as potassium chloride solution) are diluted as recommended for oral administration, since there is a high potential for gastric irritation when medications are administered directly into the stomach through enteral tubes. The consultant pharmacist and/or dispensing pharmacy is contacted with questions and the physician is contacted if new orders are necessary.
- J. Avoiding drug & formula interactions: a limited number of medications, such as Dilantin[®] (phenytoin) suspension should be administered with the tube feeding stopped. For continuous feeding schedules, this means that windows for medication administration need to be calculated into the 24-hour feeding schedule. Feeding should be stopped one hour prior to the dose, and not re-started until one hour after the dose. For a twice daily dose such as required for Dilantin Suspension, this means the feeding will be scheduled over 20 hours instead of 24 hours. A feeding rate of 1800 cal/24 hour would then be 1800 cal/20 hours, or 90cal/hr. This rate may then be converted to an mL/hr rate depending on the formula and pump capabilities.

References:

¹Section 483. 25(m), F-332/333, of the Centers for Medicare & Medicaid (CMS) Guidance to Surveyors for LTC Facilities states, "Flush the enteral feeding tube with at least 30 ml of preferably warm water before and after medications are administered. While it is noted that some facility policies ideally adopt flushing the tube after each individual medication is given, as opposed to after the group of multiple medications is given, unless there are known compatibility problems between medicines being mixed together, a minimum of one flushing before and after giving the medications is all the surveyor need review. There may be cases where flushing with 30 ml after each single medication is given may overload an individual with fluid, raising the risk of discomfort or stress on body functions."

²CREST (Clinical Resource Efficiency Support Team) Home Enteral Tube Feeding Working Groups. *Guidelines for the Management of Enteral Tube Feeding in Adults*. 2004.

³Boullata, J. "Practice Issues in Enteral Nutrition: Water" - accessed on 12/3/09 at: <http://www.eatright.org/docs/fnce/2009/BoullataHandout.pdf>

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IIA10: SELF-ADMINISTRATION OF MEDICATIONS

Policy

In order to maintain the residents' high level of independence, residents who desire to self-administer medications are permitted to do so if the facility's interdisciplinary team has determined that the practice would be safe for the resident and other residents of the facility and there is a prescriber's order to self-administer.

Procedures

- A. If the resident desires to self-administer medications, an assessment is conducted by the interdisciplinary team of the resident's cognitive (including orientation to time), physical, and visual ability to carry out this responsibility during the care planning process.
- B. If the resident indicates no desire to self-administer medications, this is documented in the appropriate place in the resident's medical record, and the resident is deemed to have deferred this right to the facility.
- C. For those residents who self-administer, the interdisciplinary team verifies the resident's ability to self-administer medications by means of a skill assessment conducted on a **quarterly** basis or when there is a significant change in condition.
 - 1) Specially prepared medication packages containing a medication substitute (for example, M&Ms or other candies) are obtained from the provider pharmacy. These packages contain a complete label with administration instructions for the resident's medications and are exactly the same as those used in the facility. **[Alternatively, the facility utilizes the resident's existing medication packages having the resident complete all steps except for the actual removal of the medication from the package.]**
 - 2) The resident is instructed in the use of the package, purpose of the medication, reading of the label, and scheduling of medication doses.
 - 3) The resident is then requested to read the label on each package and indicate at what time the medication should be taken and any other special instructions for use.
 - 4) The resident is asked to demonstrate the removal of the medication from the package and, in the case of nonsolid dosage forms such as an inhaler, to verbalize the steps involved in administration.
 - 5) The resident is asked to complete a bedside record indicating the administration of the medication (if bedside storage is to be used).
- D. The results of the interdisciplinary team assessment of resident skills and of the determination regarding bedside storage are recorded in the resident's medical record, on the care plan. For each medication authorized for self-administration, the label contains a notation that it may be self-administered.
- E. If the resident demonstrates the ability to safely self-administer medications, a further assessment of the safety of bedside medication storage is conducted.

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- F. Bedside medication storage is permitted only when it does not present a risk to confused residents who wander into the rooms of, or room with, residents who self-administer. Conditions outlined in ID3: BEDSIDE MEDICATION STORAGE are met for bedside storage to occur.
- G. When the interdisciplinary team determines that bedside or in-room storage of medications would be a safety risk to other residents, the medications of residents permitted to self-administer are stored in the central medication cart or medication room. The resident requests each dose from the medication nurse, who provides the medication to the resident in the unopened package for the resident to self-administer. The nurse then records such self-administration on the MAR by **placing a check mark in the appropriate space and noting in the nursing comments the initials of the nurse who obtained the information from the resident**.

See also policy and procedure ID3: BEDSIDE MEDICATION STORAGE

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB1: ADMINISTRATION PROCEDURES FOR ALL MEDICATIONS

Policy

To administer medications in a safe and effective manner.

Procedures

- A. Security: All medication storage areas (carts, medication rooms, central supply) are locked at all times unless in use and under the direct observation of the medication nurse/aide.
- B. Privacy:
 - 1) Provide privacy for resident during administration of medications,
 - 2) Secure (cover) records containing protected health information, (e.g., Medication Administration Records (MARs) and Treatment Administration Records (TARs)).
- C. Review 5 Rights (3) times:
 - 1) Prior to removing the medication package/container from the cart/drawer;
 - a. Check MAR/TAR for order.
 - b. Note any allergies or contraindications the resident may have prior to drug administration.
 - c. If unfamiliar with the medication, consult a drug reference, manufacturer package insert, or pharmacist for more information.
 - d. Check for vital signs, other tests to be done during/prior to medication administration.
 - e. Prepare resident for medication administration.
 - 2) Prior to removing the medication from the container
 - a. Check the label against the order on the MAR.
 - b. Note any supplemental labeling that applies (fractional tablet, multiple tablets, volume of liquid, shake well, give with another medication, etc).
 - c. Due to the complexity and length/amount of instructions, some medications may be labeled “use as directed.” Refer to the MAR for instruction details.
 - 3) After the dose has been prepared and before returning the medication to storage.
- D. Check expiration date on package/container before administering any medication. When opening a multi-dose container, place the date on the container.
- E. Identify resident using an appropriate identification method before administering medication (e.g., photo plus verbal confirmation of last name, photo and confirmation by family member, etc.).

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

- F. Cleanse hands using antimicrobial soap and water or facility-approved hand sanitizer before beginning a med pass, before handling medication, before contact with resident, and when indicated with specific types of medications.
- G. Use a barrier (e.g., clean disposable tray or plastic cup) to carry medication containers into the resident's room, if the resident has a known contagious condition or infection. This will serve as a barrier between the supplies and the over-the-bed table or other surface on which the supplies are placed while the medication is administered.
- H. When applicable, explain to resident the type of medication being administered.
- I. Obtain and record any vital signs or other monitoring parameters ordered or deemed necessary prior to medication administration.
- J. After administration, return to cart, replace medication container (if multi-dose and doses remain), and document administration in the MAR or TAR, and controlled substance sign out record, if indicated.
- K. Monitor for side effects or adverse drug reactions immediately after administration and throughout each shift.
- L. If resident refuses medication, document refusal on MAR or TAR. Research refusals for possibility of dry mouth, resident reluctance, development of swallowing difficulty.
- M. When administering an "as needed" (PRN) medication, document reason for giving, observe for medication actions/reactions and record appropriately.
- N. Once removed from the package or container, unused or partial doses should be disposed of in accordance with the medication destruction policy. If the medication is a controlled substance, the procedure for destruction of controlled substances should be followed.
- O. When finished with each resident, wash hands with antimicrobial soap and water or use facility-approved hand sanitizer.
- P. Notification of Physician/Prescriber
 - 1) Persistent refusals
 - 2) Held medications for pulse, blood pressure, low or high blood sugar, or other abnormal test results, vital signs, resulting in medications being held
 - 3) Suspected adverse drug reactions

These guidelines refer to all medications, in addition to specific procedures for each route of administration.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB2: ORAL MEDICATION ADMINISTRATION

Purpose

To administer oral medications in a safe, accurate, and effective manner.

Equipment Required

- A. Medication cart (if medications are stored in a central location) with medications.
- B. Refrigerated medications (if applicable).
- C. Medication book or computer containing Medication Administration Record (MAR, eMAR).
- D. Calibrated medication cups or syringe (if applicable) for liquid medications
- E. Soufflé cups for solid medications
- F. Drinking cups; straws.
- G. Mortar and pestle/tablet crusher/tablet splitter.
- H. Pitcher of water and other liquids to be administered during the medication pass.
- I. Spoons and other devices required for the administration of medications.
- J. Applesauce, pudding, food, etc. (if needed for medications opened/crushed and administered in food).
- K. Supplements on ice.
- L. Controlled substances records (if appropriate).
- M. Facility-approved hand sanitizer.
- N. Waste receptacle for trash and a separate container for contaminated pills.
- O. Drug reference (available in facility).
- P. Sharps container (alternatively, may be located in resident's room).

Special Considerations

- A. Refer to crushing guidelines prior to crushing any medication for assurance that it can be pulverized.
- B. Refer to medication reference text for administration of any medication when added to any substance such as applesauce, juice, milk, etc. or confirm with pharmacist.
- C. Mortar and pestle/tablet crusher/tablet splitter should be cleaned after each use if a double soufflé cup or other protective cover is not used between the tablet and all surfaces of the device. The crushing device should be cleaned at the end of each medication pass.

Procedures

- A. Wash hands when beginning a med pass, or when contact with resident is expected or has occurred.
- B. Review and confirm medication orders for each individual resident on the Medication Administration Record PRIOR to administering medications to each resident. Review medication administration record for

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

any tests or vital signs that need to be determined prior to preparing the medications. Discuss with resident and determine if there is a need for any “as needed” medication such as for pain.

- C. For solid medications:
 - 1) Pour or push the correct number of tablets or capsules into the soufflé/medication cup, taking care to avoid touching the tablet or capsule, unless wearing gloves.
 - 2) Crush medications, if indicated by prescriber’s order for this resident, only after checking the Medication Crushing Guidelines. Crush in tablet crusher or mortar and pestle or with other appropriate device and clean immediately after use if a double soufflé cup or other protective cover is not used between the tablet and the device. Mix crushed medications in small amount of appropriate substance (e.g. applesauce, juice, etc).
- D. For liquid medications:
 - 1) Shake well liquids labeled as a suspension (i.e., SUSP).
 - 2) Pour correct amount directly into a graduated/calibrated medication cup or measuring device or pull up correct amount into an oral syringe. Measure volume at eye level, on a flat surface, and read volume from the bottom of the meniscus (curve).
 - 3) Wipe rim and sides of bottle with tissue or paper towel and replace cap after pouring.
 - 4) Any dropper supplied with a medication should be used to measure dose. If none is supplied, oral dosing syringes with appropriate calibrations are used.
 - 5) Dilute liquid medication in fluid if indicated by prescriber’s order. Liquid potassium supplements must be diluted. Bulk laxatives, and liquid stool softener may be diluted in juice or water at the nurse’s discretion in the volume recommended by the manufacturer.
- E. If resident is in bed, head of bed should be elevated to greater than 45 degrees prior to administration of medication and for at least two minutes after or ask resident to sit upright for a time specified by the medication manufacturer (e.g., bisphosphonates).
- F. Administer medication and remain with resident while medication is swallowed. Caution with residents who have difficulty with swallowing. Do not leave medications at bedside, unless specifically ordered by prescriber.
- G. Follow all medication with 4 to 8 ounces of water. Be especially aware of certain medications that require water or other liquid for safety reasons. Examples: liquid potassium products should be diluted in juice; osteoporosis medications must be administered with a full glass of water (and with the resident in an upright position), and non-steroidal anti-inflammatory agents must be administered with a full glass of water. All of these medications can erode the esophagus or stomach if not administered with adequate fluids.
- H. When finished with each resident, wash hands with antimicrobial soap and water or use facility-approved hand sanitizer.
- I. Chart medication administration on Medication Administration Record immediately following each resident’s medication administration.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB3: SUBLINGUAL, BUCCAL, AND TRANSMUCOSAL MEDICATION ADMINISTRATION

Purpose

To administer sublingual medications under the resident's tongue in a safe, accurate, and effective manner. To administer buccal medications in the resident's cheek in a safe, accurate, and effective manner. To administer transmucosal medication in the mouth, without swallowing it whole, in a safe, accurate, and effective manner.

Equipment Required

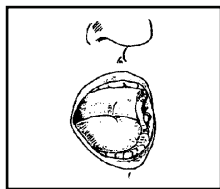
- A. Medication cart (if medications are stored in a central location) with medications.
- B. Refrigerated medications if applicable.
- C. Soufflé cup.
- D. Medication administration record (MAR).
- E. Facility-approved hand sanitizer.
- F. Examination gloves.
- G. Drinking cups, straws.
- H. Pitcher of water, and other liquids to be administered during the medication pass.
- I. Controlled substances records (if appropriate).
- J. Waste receptacle.
- K. Drug reference (available in facility).

Procedures

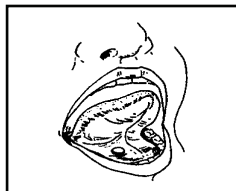
Sublingual / Buccal Tablets

- A. Put on examination gloves.
- B. Pour proper number of sublingual/buccal tablets/capsules into soufflé/medication cup.
- C. Have resident take a sip of water to moisten his or her mouth, and instruct resident to swallow water.
- D. Place medication in the resident's mouth or help resident to do so if capable, following the directions shown below.
 - 1) Place buccal tablet in the pouch between cheek and upper or lower gum.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES



- 2) Place sublingual tablet under the tongue.



- E. Instruct resident to close his/her mouth and to not swallow or chew until the tablet has completely dissolved. Eating, drinking, and smoking should be avoided while the tablet is dissolving.
- F. Instruct the resident to avoid rinsing the mouth for several minutes after the tablet has dissolved.
- G. Remove and dispose of examination gloves. Wash hands thoroughly with antimicrobial soap and water.

Buccal Film (e.g., Onsolis®)

- A. Put on examination gloves.
- B. Instruct resident to wet the inside of the cheek using the tongue or rinse the mouth with water to wet the area for placement of film.
- C. Open the medication package immediately prior to product use. Place the entire film near the tip of a gloved finger with the designated side facing up. Place the designated side of the film against the inside of the cheek.
- D. Press and hold the film in place for 5 seconds. The film should stay in place on its own after this period. Liquids may be consumed after 5 minutes.
- E. The-film should not be cut or torn prior to use.
- F. The film will dissolve within 15 to 30 minutes after application. The film should not be manipulated with the tongue or finger(s) and eating food and smoking should be avoided until the film has dissolved.
- G. Remove and dispose of examination gloves. Wash hands thoroughly with antimicrobial soap and water or facility-approved hand sanitizer.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

Transmucosal Tablet/Lozenge (e.g. ACTIQ®)

- A. If resident contact is expected, wear examination gloves.
- B. Place unit in mouth (or instruct resident to place in mouth) and allow it to dissolve. Tablet/lozenge may be moved from one side of the mouth to the other. Instruct resident to suck (do not chew) on the tablet/lozenge over time recommended in manufacturer recommendations (e.g., 15 minutes). Applicator/handle should be removed after tablet/lozenge is consumed or if resident has achieved an adequate response from medication or if excessive sedation or other effects occur.
- C. Remove and dispose of examination gloves. Wash hands thoroughly with antimicrobial soap and water or facility-approved hand sanitizer.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB4: NASAL ADMINISTRATION

Purpose

To administer nasal medications in a safe, accurate, and effective manner.

Equipment Required

- A. Inhalation or spray medication (refrigerated item if necessary).
- B. Tissues or gauze.
- C. Examination gloves.
- D. Barrier (e.g., disposable tray or plastic cup).
- E. Facility-approved hand sanitizer.
- F. Medication Administration Record (MAR).
- G. Waste receptacle.
- H. Drug reference (available in facility).

Procedures

NASAL SPRAY/PUMP/INHALER

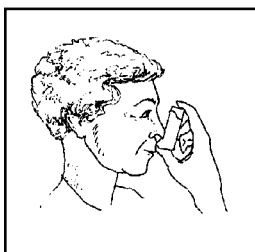
- A. Put on examination gloves.
- B. If needed (check package insert): Gently shake bottle.
- C. Remove the cap and place it on the barrier or a clean dry surface.
- D. If needed (check package insert): Prime the pump by holding the bottle upright and away from the resident while spraying into the air.
- E. If possible, have the resident gently blow their nose to remove excess mucous.
- F. Hold the pump or spray bottle with your thumb on the bottom and your index and middle fingers on either side of the spray tip. For inhalers, hold the inhaler with thumb on bottom and index finger on top.
- G. Resident should be sitting up, if possible. Instruct the resident to hold head in an upright position, slightly tilted forward.
- H. Use finger of other hand to close the nostril that is not receiving medication by gently pressing the side of the nostril.
- I. Keep the bottle upright and insert the spray tip into the nostril (no more than ¼ inch). Point the tip to the back and outer side of the nose.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

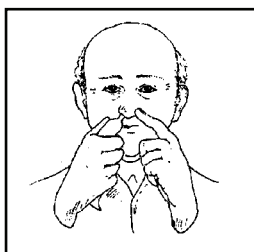
- J. Ask resident to breathe out through mouth.
- K. Press actuator or spray tip firmly and quickly while the resident breathes in through the nose and out through the mouth.
- L. After removing the spray bottle, some manufacturers recommend tilting the head back for several seconds to aid the penetration of the drug.
- M. If medication is in gel form without a pump or applicator, apply with a clean cotton swab, unless directed otherwise.
- N. If medication is in gel form, massage the nostril in which the medication was administered for a few seconds.
- O. Wipe any excess drainage with a clean tissue. Instruct resident to avoid blowing their nose for 15 minutes.
- P. If another dose of the same or different nasal medication is required in the same nostril, wait the amount of time recommended by the manufacturer (see package insert), then repeat procedures above. If a dose is required in the other nostril, repeat procedures above.
- Q. Clean spray tip and device according to manufacturer's recommendations.
- R. Replace cap/cover.
- S. Remove and dispose of gloves. Discard barrier. Wash hands thoroughly with antimicrobial soap and water or facility-approved hand sanitizer.

NOSE DROPS

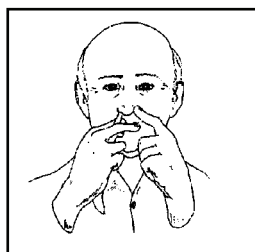
- A. Instruct resident to hold head back (can be performed in a chair or, if in bed, place pillow under shoulder allowing for the forehead to be lower than the chin).
- B. Instill drops directing flow towards floor of nasal cavity and instruct resident to maintain position for about 2 minutes.
- C. Clean tip if appropriate, replace cap/cover. Wash hand thoroughly with antimicrobial soap and water or facility-approved hand sanitizer.



nasal inhaler



nasal spray



nasal pump

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB5: EYE DROP ADMINISTRATION

Purpose

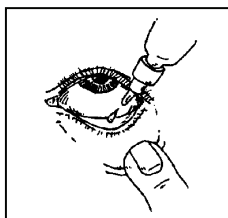
To administer ophthalmic solution/suspension into the eye in a safe, accurate, and effective manner.

Equipment Required

- A. Eye drop medication.
- B. Gauze pad, cotton ball, or tissue.
- C. Examination gloves.
- D. Barrier (e.g., disposable tray or plastic cup).
- E. Medication Administration Record (MAR).
- F. Waste receptacle.
- G. Drug reference (available in facility).

Procedures

- A. If the resident wears contact lenses, remove them before using eye drops and wait 15 minutes before reinserting them.
- B. Wash your hands with antimicrobial soap. Avoid hand sanitizer for eye drop administration as contact with the eye could cause discomfort.
- C. Put on examination gloves.
- D. If the eye drop is a suspension (read label), shake well.
- E. Remove the cap, taking care to avoid touching the dropper tip. Place the cap on the barrier or a clean, dry surface.
- F. Tilt resident's head slightly back.
- G. With a gloved finger, gently pull down lower eyelid to form "pouch," while instructing resident to look up. Place other hand against resident's forehead to steady. Hold inverted medication bottle between the thumb and index finger, and press gently to instill prescribed number of drops into "pouch" near outer corner of eye. Do NOT let tip of dropper touch the eye or any other surface. If resident blinks or drop lands on cheek, repeat administration.



SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

- H. Instruct resident to close eyes slowly to allow for even distribution over surface of the eye. The resident should also refrain from blinking or squeezing eyes shut.
- I. While the eye is closed, use one finger to compress the tear duct in the inner corner (inner canthus) of the eye for 1-2 minutes. This reduces systemic absorption of the medication. Alternatively, the resident may keep his/her eyes closed for approximately three minutes.¹
- J. Wipe off tears or excess solution with clean gauze, cotton ball, or tissue.
- K. If another drop of the same or different medication is prescribed for administration in the same eye at the same time, wait 3 to 5 minutes,^{2,3} then repeat procedure above.
- L. If administering medications to both eyes, use a different gloved finger to apply pressure to the inner tear duct. If the eye medication is an antibiotic or anti-viral and the resident has an active eye infection, change gloves between eyes. If one eye is infected, treat the infected eye last.
- M. Recap bottle.
- N. Remove and dispose of gloves. Discard any barrier used for carrying or storing the medication and supplies. Wash hands thoroughly with antimicrobial soap and water.

References:

¹Section 483.25(m), F-332/333, of the Centers for Medicare & Medicaid (CMS) Guidance to Surveyors for LTC Facilities states, "When the procedures are possible, systemic effects of eye medications can be reduced by pressing the tear duct for one minute after eye drop administration or by gentle eye closing for approximately three minutes after the administration."

²Section 483.25(m), F332-333, of the Centers for Medicare and Medicaid Services (CMS) Guidance to Surveyors for long-term care facilities states, "that a medication error is "...the observed preparation or administration of drugs or biologicals which is not in accordance with...manufacturer's specifications (not recommendations) regarding the preparation and administration of the drug or biological."

³It is important to review each ophthalmic medication's approved prescribing information (package insert), as some manufacturers recommend specific administration and/or spacing timeframes. For example, package inserts and drug information references recommend waiting 10 minutes between administration of levobunolol, timolol, brinzolamide, or dorzolamide and other ophthalmic medications.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB6: EYE OINTMENT AND GEL ADMINISTRATION

Purpose

To administer ophthalmic ointment or gel into and around the eye in a safe, accurate, and effective manner.

Equipment Required

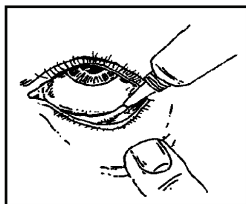
- A. Tube of ophthalmic ointment or gel (refrigerated items if applicable).
- B. Gauze pad, cotton ball, or tissue.
- C. Examination gloves.
- D. Barrier (e.g. disposable tray, plastic cup).
- E. Medication Administration Record (MAR).
- F. Facility-approved hand sanitizer.
- G. Waste receptacle.
- H. Drug reference (available in facility).

Procedures

- A. If the resident wears contact lenses, remove them before using eye ointment/gel. If the resident for whom eye ointment is prescribed wears contacts, check with the prescriber for further direction. If eye ointment is ordered to be administered throughout the day, wearing contacts is not usually recommended. If using eye ointment only at night, contacts may be inserted the following morning and removed prior to the next administration, if approved by the prescriber.
- B. Put on examination gloves.
- C. Wash your hands with antimicrobial soap. Avoid hand sanitizer for eye ointment administration as contact with the eye could cause discomfort.
- D. Remove the cap, taking care to avoid touching the tip of the tube. Place the cap on the barrier or a clean, dry surface.
- E. Tilt the resident's head slightly back.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

- F. With a gloved finger, gently pull down lower eyelid to form “pouch,” while instructing resident to look up. Place other hand against resident’s forehead to steady. Hold inverted medication tube between the thumb and index finger, and squeeze thin line of ointment (prescribed length) into “pouch.” Do NOT let tip of tube touch the eye or any other surface. Twisting of the tube may help break the ribbon of ointment. Do not rub the tip on the skin to break the ribbon.



- G. Instruct resident to close eyes slowly and rotate eyeball to allow for even distribution of the ointment over the surface of the eye. The resident should refrain from blinking or squeezing eyes shut. Instruct resident to keep eye closed for at least 1-2 minutes.
- H. Wipe off excess ointment/gel with clean gauze, cotton ball, or tissue.
- I. Eye ointments tend to blur vision. Inform resident about this side effect upon initial use, and remind resident to be cautious.
- J. Recap tube.
- K. Remove and dispose of gloves. Discard any barrier used for carrying or storing the medication and supplies. Wash hands thoroughly with antimicrobial soap and water.
- L. If more than one eye medication is to be administered at the same time as an eye ointment, consult the prescriber/pharmacist for directions.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB7: EAR DROP ADMINISTRATION

Purpose

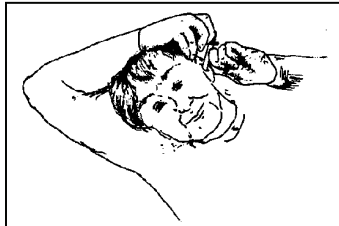
To administer otic medication into the auditory canal in a safe, accurate, and effective manner.

Equipment Required

- A. Otic medication (in dropper bottle).
- B. Cotton balls.
- C. Examination gloves.
- D. Barrier (e.g., disposable tray or plastic cup).
- E. Facility-approved hand sanitizer.
- F. Medication Administration Record (MAR) or Treatment Administration Record (TAR).
- G. Waste receptacle.
- H. Drug reference (available in facility).

Procedures

- A. Wash hands or use facility-approved hand sanitizer. Examination gloves may be worn.
- B. Resident can lie down or sit in chair. Turn resident's head so that the affected ear is facing up.
- C. If needed: Gently shake bottle (for suspensions) or warm bottle in hand before administering.
- D. If the bottle serves as the dropper, remove cap and place it upright on barrier or on a clean, dry surface.
- E. Straighten the ear canal by gently pulling ear lobe up and backward.
- F. Instill the prescribed number of drops into the ear canal. Do not touch the tip of the dropper to any surface, including the ear.



- G. Recap bottle. Do not rinse the dropper after use. Keep the container tightly closed.
- H. Instruct the resident to remain in same position approximately 5 minutes with affected ear upward. Gently place a cotton ball in ear to prevent excessive leakage of medication if necessary.
- I. Remove and dispose of gloves, if worn. Discard any barrier used for carrying or storing the medication and supplies. Wash hands thoroughly with antimicrobial soap and water or facility-approved hand sanitizer.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB8: ORAL INHALATION ADMINISTRATION

Purpose

To allow for safe, accurate, and effective administration of medication using an oral inhaler (with or without a spacer/chamber) or nebulizer.

Equipment Required

- A. Inhaler (or inhalation solution if using a nebulizer).
- B. Holding chamber or spacer device, if used.
- C. Nebulizer kit, including nebulizer, medication cup, T-piece, mouthpiece (or facemask), and tubing (if using a nebulizer).
- D. Syringe, needle if necessary to draw up non-unit dosed medication for nebulizer.
- E. Examination gloves.
- F. Barrier (e.g., disposable tray or plastic cup).
- G. Cup of water (if inhaler is steroidal).
- H. Medication Administration Record (MAR).
- I. Waste receptacle.
- J. Drug reference (available in facility).

Procedures

SEQUENCING OF INHALER MEDICATIONS

Bronchodilators are given first. (ex: albuterol)

Anticholinergics are given second. (ex: ipratropium (Atrovent®)),

Steroid inhaler is always given last and never on a PRN basis. (ex: Advair®, Azmacort®, Pulmicort®)

Rescue inhalers (bronchodilators) given on a PRN basis should be coordinated with any routine dose given to avoid excessive dosing of these medications.

Refer to the Appendix - Inhaler chart for additional guidance

If you are not sure what category of drug is contained in an inhaler, check with the pharmacist.

METERED DOSE AND DRY-POWDER INHALERS

- A. Review the packaging insert if unfamiliar with the inhalation device provided.
- B. Wash hands if visibly soiled, beginning a med pass, or if direct contact with resident is expected.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

- C. Examination gloves may be worn.
- D. Determine that an adequate amount of medication is remaining in the aerosol canister.
- E. If using a spacer, examine the spacer/holding chamber and remove any foreign objects.
- F. Remove inhaler mouthpiece cap (and spacer cap). If not connected, place cap(s) upright on the barrier or a clean, dry surface.
- G. Hold inhaler upright and shake well. Dry-powder inhalers are usually held in a horizontal position and are not shaken.
- H. If necessary, prime inhaler. Prime new inhalers by depressing until a full dose is emitted. Do not spray toward resident while priming (see below*).
- I. Some dry-powder inhalers (ex: Spiriva®) require placement of the medication-containing capsule into a dedicated device (ex: Spiriva® Handihaler) device.
- J. If using a spacer, insert the mouthpiece on the inhaler into the flexible rubber end of the spacer.
- K. Ask resident to breathe out as deeply as possible (do not exhale into inhaler).
- L. Position inhaler for administration:
 - 1) If not using a spacer:
 - a. Open mouth and position the inhaler one or two inches from mouth, OR
 - b. Place inhaler mouthpiece under top teeth and above tongue with mouth/lips closed around the mouthpiece.
 - 2) If using a spacer, place spacer in resident's mouth with mouth/lips closed around spacer mouthpiece. Only one spray or "puff" at a time can be administered through the spacer.
- M. Press down on inhaler once to release medication as resident starts to breathe in slowly through the mouth over 3 to 5 seconds. (Do not spray more than one puff at a time.) With dry-powder inhalers, the dose is activated by pushing or twisting the lever/device. Also, breathing in quickly and deeply through the mouth usually yields the best results with dry-powder inhalers.
- N. Hold breath for 10 seconds or as long as possible to allow medication to reach deeply into lungs.
- O. Slowly exhale through nose.
- P. If another puff of the same medication is required, wait at least 1-2 minutes between, then repeat procedures above. If another puff of a different medication is required, wait at least 5-15 minutes before administering. Some dry-powder inhalers require more than one inhalation to receive the full dose (see package insert).
- Q. For steroid inhalers, provide resident with cup of water and instruct him/her to rinse mouth and spit water back into cup.
- R. For dry-powder inhalers (often called "Diskus"), close device according to manufacturer recommendations to ensure next dose will be ready. If capsule was manually inserted, remove the empty capsule after administration.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

- S. If necessary (according to package insert or other reference), wash and thoroughly dry mouthpiece. Otherwise, wipe the mouthpiece down. If using a spacer, wash spacer according to manufacturer's recommendations.
- T. Remove and dispose of gloves, if worn. Discard any barrier used for carrying or storing the medication and supplies. Wash hands using antimicrobial soap and water or facility-approved sanitizer.
- U. Store inhaler with cap on.

*** Priming of Metered Dose Inhalers** (see manufacturer package insert or other reference to determine when and how each inhaler should be primed)

- A. Hold the inhaler in an upright position away from the face and eyes.
- B. Spray the test sprays into the air to ensure medication is coming out and the device is working.
- C. This process should occur:
 - 1) Before initial use.
 - 2) If the inhaler has not been used for several days.
 - 3) If the inhaler has been dropped.

NEBULIZER - Administering Medications through a Small Volume (Handheld) Nebulizer

- A. Assemble equipment and supplies on the resident's overbed table, with a barrier between supplies/medication and table.
- B. Wash hands or use facility-approved hand sanitizer.
- C. Position the resident in semi-Fowler's position.
- D. Obtain baseline pulse, respiratory rate and lung sounds if indicated.
- E. Draw up the medication to be nebulized if the medication is not in a unit-dose container.
- F. Pour medication into nebulizer cup.
- G. Add the diluent, if ordered or required by the manufacturer (see package insert).
- H. Assemble nebulizer equipment and attach to nebulizer compressor or gas source per manufacturer's instructions. Adjust the flow rate as ordered or per facility protocol.
- I. Turn on the nebulizer and check the outflow port for visible mist.
- J. Ask the resident to hold the mouthpiece gently between his/her lips (or apply face mask).
- K. Instruct the resident to take a deep breath, pause briefly and then exhale normally. Repeat pattern throughout treatment.
- L. Remain with the resident for the treatment unless the resident has been assessed and authorized to self-administer.
- M. Approximately five minutes after treatment begins (or sooner if clinical judgment indicates) obtain the resident's pulse if indicated.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

- N. Monitor for medication side effects, including rapid pulse, restlessness and nervousness throughout the treatment.
- O. Stop the treatment and notify the physician if the pulse increases 20 percent above baseline or if the resident complains of nausea or vomits.
- P. Tap the nebulizer cup occasionally to ensure release of droplets from the sides of the cup.
- Q. Encourage the resident to cough and expectorate as needed.
- R. Administer therapy until medication is gone (mist has stopped) or until the designated time of treatment has been reached.
- S. When treatment is complete, turn off nebulizer and disconnect T-piece, mouthpiece and medication cup.
- T. Obtain post-treatment pulse, respiratory rate and lung sounds and document findings if indicated.
- U. Rinse and disinfect the nebulizer equipment according to manufacturer's recommendations, or per facility policy.
- V. Wash hands thoroughly.
- W. When equipment is completely dry, store in a plastic bag with the resident's name and the date on it.
- X. Change equipment and tubing every seven days or per facility policy.
- Y. Disinfect outside of the compressor between residents, according to manufacturer's instructions.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB9: RECTAL SUPPOSITORY ADMINISTRATION

Purpose

To administer medication rectally in a safe, accurate, and effective manner. Rectal suppositories may be used as a drug delivery vehicle (e.g. prochlorperazine for nausea) or for bowel evacuation.

Equipment Required

- A. Rectal suppository.
- B. Examination gloves.
- C. Lubricant.
- D. Tissue or paper towel.
- E. Medication administration record (MAR) or Treatment administration record (TAR).
- F. Bedpan or commode, where applicable.
- G. Facility-approved hand sanitizer.
- H. Controlled substances records (if appropriate).
- I. Facility-approved hand sanitizer.
- J. Waste receptacle.
- K. Drug reference (available in facility).

Procedures

- A. Put on examination gloves.
- B. Assist resident in turning to their side with knees bent.
- C. Remove wrapper from suppository.
- D. Lubricate index finger and suppository.
- E. Separate buttocks.
- F. Insert suppository gently:
 - 1) Ask the resident to take a deep breath, to relax the anal sphincter.
 - 2) Insert the suppository about 3 inches beyond the sphincter.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

- 3) Apply pressure with tissue over anus briefly until desire to expel suppository has passed.
 - 4) If used for bowel evacuation, instruct resident to retain suppository for 10-15 minutes if possible.
- G. If suppository was for bowel evacuation, assist resident onto a bedpan, commode, or toilet. Make the resident comfortable. If suppository was for medication delivery, review reason for medication with resident and explain anticipated outcomes (e.g. fever reduction with use of acetaminophen).
- 1) Ensure call signal is within the resident's reach and check back at intervals.
 - 2) Elevate head of bed to Fowler's position if the resident remains in bed.
- H. Remove any soiled articles. Place in covered, plastic-lined container in utility room per facility policy.
- I. Discard supplies. Remove and discard examination gloves. Wash hands thoroughly with antimicrobial soap and water or facility-approved hand sanitizer.
- J. Document effect of suppository if administered for bowel evacuation or medication delivery.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB10: RECTAL ENEMA ADMINISTRATION

Purpose

To administer medication rectally in a safe, accurate, and effective manner. (Note: not all enemas are used for bowel evacuation; some are used as a delivery vehicle for medications.)

Equipment Required

- A. Rectal enema.
- B. Examination gloves.
- C. Lubricant.
- D. Tissue or paper towel.
- E. Medication administration record (MAR) or Treatment Administration Record (TAR).
- F. Bedpan or commode where applicable.
- G. Controlled substances records (if appropriate).
- H. Facility-approved hand sanitizer.
- I. Waste receptacle.
- J. Drug reference (available in facility).

Procedures

Please note that for enemas used for drug delivery, the resident may benefit from having a bowel movement prior to enema administration. The enema may also have a recommended administration schedule based on optimal retention time (e.g. at bedtime to facilitate 8 hours of retention.) Check with the manufacturer instructions or with the pharmacist prior to administration.

- A. Review and confirm medication orders for each individual resident on the Medication Administration Record or Treatment Administration Record PRIOR to administering medications to each resident.
- B. Put on examination gloves.
- C. Assist resident in turning to their side with knees bent.
- D. Prepare medication/enema for administration. Shake well if indicated by manufacturer instructions.
- E. Separate buttocks.
- F. Insert enema tip gently:

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- 1) Ask the resident to take a deep breath, to relax the anal sphincter.
 - 2) Insert enema tip into rectum about 3 inches beyond the sphincter.
- G. Slowly empty the contents of the enema into the colon.
- 1) Instruct resident to resist urge to expel colon contents while enema is being administered, and afterward for as long as possible.
 - 2) If resident is uncomfortable, enema flow rate may be too fast; adjust administration rate.
- H. If used for bowel evacuation, the enema solution should be retained until definite lower abdominal cramping is felt. If used for drug delivery (e.g. a steroidal medication), the enema solution should be retained for the length of time indicated in the manufacturer's recommendations.
- I. Following administration of enema for bowel evacuation, assist resident onto a bedpan, commode, or toilet. Make the resident comfortable.
- 1) Ensure call signal is within the resident's reach and check back at intervals.
 - 2) Elevate head of bed to Fowler's position if the resident remains in bed.
- J. Remove any soiled articles. Place in covered, plastic-lined container in utility room. Following administration of the enema for drug delivery, assist the resident into a comfortable position or position indicated in the manufacturer's recommendations. This type of enema may/may not result in rectal evacuation.
- 1) Ensure call signal is within the resident's reach and check back at intervals.
 - 2) Remove any soiled articles. Place in a covered, plastic-lined container in utility room.
- K. Discard supplies. Remove and discard examination gloves. Wash hands thoroughly with antimicrobial soap and water or facility-approved hand sanitizer.
- L. Document effect of enema if administered for bowel evacuation. If enema used for drug delivery, document length of time retained and if bowel evacuation occurred.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB11: VAGINAL MEDICATION ADMINISTRATION

Purpose

To administer medication vaginally in a safe, accurate, and effective manner.

Equipment Required

- A. Vaginal medication.
- B. Examination gloves.
- C. Water-soluble gel, if appropriate.
- D. Applicator, if appropriate.
- E. Tissue or paper towel.
- F. Barrier (e.g., disposable tray or plastic cup).
- G. Medication Administration Record (MAR).

Procedures

- A. Place tablet/suppository in applicator or draw cream/gel into applicator.
- B. Have resident lie on back with knees flexed and legs spread apart, or on left side with knees bent.
- C. Wearing gloves, examine perineum.
- D. Clean area if discharge is noted.
- E. With one hand, spread apart the labia.
- F. Place applicator into vagina and advance the plunger to instill gel or cream or to release tablet or suppository.
- G. If administering without an applicator, insert lubricated tablet or suppository approximately 3-4 inches into vaginal area.
- H. Wipe lubricant from vaginal area with tissue or paper towel.
- I. Advise resident to remain lying down for at least 30 minutes.
- J. Remove any soiled articles. Place in covered, plastic-lined container in utility room.
- K. Discard supplies. Remove and discard examination gloves. Wash hands thoroughly with antimicrobial soap and water or facility-approved hand sanitizer.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB12: ENTERAL TUBE MEDICATION ADMINISTRATION

Policy

The facility assures the safe and effective administration of enteral formulas and medications via enteral tubes. Selection of enteral formulas, routes and methods of administration, and the decision to administer medications via enteral tubes are based on nursing assessment of the resident's condition, in consultation with the physician, dietitian, and consultant pharmacist.

Equipment

- A. Medication(s).
- B. 60mL catheter-tipped syringe (no needle).
- C. Mortar & pestle or pill crusher.
- D. Warm water for dissolving medications and flushing tube (sterile water for irrigation is recommended).
- E. Stethoscope.
- F. Examination gloves.
- G. Barrier (e.g., disposable tray) for carrying medication/cups and water to bedside.

Procedures

- A. The physician's order must specify the route of administration of any medication via feeding tube. This is either "via G-tube", "via NG tube", or via J-tube".
- B. Tablets that must be crushed prior to administration via feeding tube require a specific order related to crushing.
- C. Put on examination gloves.
- D. For medications incompatible with tube feeding (ex: Dilantin® (phenytoin) Suspension): Turn off pump to stop continuous feeding at least one (1) hour prior to medication administration if medication is associated with an incompatibility or should be given on an empty stomach.^{1,2,3} If there are any questions or concerns regarding which medications necessitate this procedure or if going without nutritional feedings for this time period may compromise the resident, consult with the resident's physician. Adjustment to the administration rate of the feeding must be made to accommodate the time needed for medication administration.
- E. Establish the privacy of the patient.
- F. Check the medication administration record (MAR) to confirm the order: note the medication, dose, route (tube), volume of water for flushing.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

G. Prepare medications for administration

- 1) NOTE: Medication administration via tube requires flushing with water at several steps in the procedure. The total volume of water used for flushing should be included in the total amount allowed per day for fluid-restricted residents.
- 2) Crush immediate-release tablets into a fine powder, and dissolve in 5-10mL of warm water, or prescribed amount.
- 3) Open immediate release capsules, crush contents into a fine powder, and dissolve in 5-10mL of warm water, or prescribed amount. NOTE: Warm water should always be used. Cold water can cause cramping or an unpleasant feeling in the stomach).
- 4) Dilute liquid medications with 10-30mL (30mL may be needed if liquid is viscous) of warm water or enteral formula (if the liquid medication is hyperosmolar and compatible with enteral formulas).
- 5) Sustained-release capsules and enteric coated capsules – check with manufacturer. The pellets inside SOME microencapsulated dosage forms may be poured down the feeding tube after being removed from the capsule, provided that the pellets are not crushed.
- 6) Some medications require apple juice or other liquid for proper transport of the capsule contents down the tube. Check the manufacturer's instructions or contact the pharmacist if there are questions about any medications.
- 7) Elevate head of bed to 30-45 degrees (semi-Fowler's or high-Fowler's position) and leave in this position at least 30 minutes after administration of medications.
- 8) With gloves on, check for proper tube placement.
- 9) Check gastric content for residual feeding. Return residual volumes to the stomach. Report any residual above 100ml.
- 10) If a pump is being used for continuous infusion, turn it off if it hasn't already been (See step D.)
- 11) Remove plunger from the 60mL catheter-tipped syringe and connect syringe to clamped tubing.
- 12) Put 15-30mL of water in syringe and flush tubing using gravity flow. Clamp tubing after the syringe is empty, allowing water to remain in the tube.
- 13) Pour dissolved/dilute medication in syringe and unclamp tubing, allowing medication to flow by gravity.
- 14) Flush with 30ml warm water before and after medication administration. Pinch tubing below the syringe tip when each volume of liquid clears the syringe to avoid excessive air from entering the stomach. This can cause discomfort or emesis.
- 15) Detach syringe.
- 16) Restart continuous feeding, if appropriate. If a medication with incompatibility issues was administered, leave pump off for one (1) hour after medication administration.

H. Managing Complications

- 1) Clogged tube – clogging can occur from kinking of the tube or from internal blockage

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

- a. Check first to see that the tube is not kinked.
 - b. If the clog is still present, gently “milk” the tube from top to bottom to release any clog that may be in this part of the tube.
 - c. Do NOT force-flush the tube or use a rigid object in an attempt to clear the tube. If the clog is persistent, contact the MD if the above techniques fail.
- 2) Emesis
- a. If emesis occurs, stop the feeding pump immediately and elevate the head of the bed to approximately 45 degrees.
 - b. Check for bowel sounds
 - c. Determine if the resident is in any pain.
 - d. Observe for any signs of aspiration – cough, sweating, shortness of breath, blueness of lips and skin
 - e. Notify the physician.

References:

- ¹ ASPEN Enteral Nutrition Practice Recommendations Task Force. Enteral Nutrition Practice Recommendations. *J Parenter Enteral Nutr.* January 27, 2009.
- ² Williams NT. Medication administration through enteral feeding tubes. *Am J Health-Syst Pharm.* 2008;65(24): 2347-2357; accessed 3/6/2010 at: <http://www.medscape.com/viewarticle/585397>.
- ³ Boullata JI. Drug administration through an enteral feeding tube. *Am J Nurs.* October 2009;109(10):34-42.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB13: TRANSDERMAL DRUG DELIVERY SYSTEM (PATCH) APPLICATION

Purpose

To administer medication through the skin through proper placement of the patch and care of the application site(s).

Equipment Required

- A. Medication patch.
- B. Two gauze pads soaked in water, and two dry gauze pads.
- C. Examination gloves.
- D. Facility-approved hand sanitizer.
- E. Barrier (e.g., disposable tray or plastic cup).
- F. Medication Administration Record (MAR).
- G. Waste receptacle.
- H. Drug reference (available in facility).

Procedures

For general guidelines on medication administration, refer to IIA1: EQUIPMENT AND SUPPLIES FOR ADMINISTERING MEDICATIONS and IIA2 MEDICATION ADMINISTRATION-GENERAL GUIDELINES.

- A. Wash hands or use facility-approved sanitizer. Examination gloves may be worn.
- B. Identify the location on the body for patch placement. Always rotate application sites to prevent irritation.
 - 1) Lidocaine patches to treat post herpetic neuropathy should not be rotated and should be applied to the painful area.
 - 2) Buprenorphine transdermal systems should not re applied to the same site for more than 21 days.
 - 3) Exelon patches should not be reapplied to the same site for more than 14 days.
- C. Remove old patch from body. Fold in half with adhesive sides together. Discard according to facility policy.
- D. Cleanse area of old patch with a clean water wet gauze pad and pat dry with another gauze pad.
- E. Cleanse area where new patch will be placed using clean water wet gauze pad and pat dry with another gauze pad.
- F. Using gloves, remove new patch from package and envelope. Avoid touching the side of the patch that touches the resident's skin.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

- G. Label patch with date and nurse's initials. Do not write on patch after application to resident's skin.
- 1) The manufacturer of lidocaine patches does not recommend writing directly on the patch to avoid puncture. Write the date and nurse's initials on a sticker and place the sticker on the back of the patch before application.
- H. Apply new patch firmly against skin.
- I. Remove and dispose of gloves. Wash hands thoroughly with antimicrobial soap and water or facility-approved hand sanitizer.
- J. Document placement site on MAR as follows or per facility policy:
- | SITE | CODE | SITE | CODE | <u>For transdermal
scopolamine:</u> | |
|-------------------|------|------------------|------|--|-------------|
| Left upper arm | LA | Left chest | LC | SITE | CODE |
| Right upper arm | RA | Right chest | RC | Behind left ear | LE |
| Left upper thigh | LT | Left upper back | LB | Behind right ear | RE |
| Right upper thigh | RT | Right upper back | RB | | |
- K. Avoid exposure to heat (e.g., heating pads, whirlpools, etc.) when a resident is wearing a transdermal patch.

NOTE: The FDA (Update 3/9/2009) has evaluated the composition of available patches to determine which of them contain metal components and to assure that this information is included in their labeling. Based on current information from this evaluation, the FDA is working with the manufacturers of the following patches to update the labeling to include adequate warnings to patients about the risk of burns to the skin if the patch is worn during an MRI scan. It should be noted that some of the drugs listed may have a generic equivalent and more than one size and strength of patch. FDA will update this posting as information becomes available.

Proprietary Name	Generic/Established Name
Catapres TTS®	Clonidine
Neupro®	Rotigotine
Lidopel®	Lidocaine HCl and epinephrine
Synera®	Lidocaine/Tetracaine
Transderm-Scop®	Scopolamine
Prostep®	Nicotine transdermal system
Habitrol®	Nicotine transdermal system
Nicotrol TD®	Nicotine transdermal system
Androderm®	Testosterone transdermal system
Duragesic®	Fentanyl
Salonpas Power Plus®	Methyl Salicylate/Menthol
Estraderm	Estradiol

SOURCE:

<http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/DrugSafetyInformationforHealthcareProfessionals/PublicHealthAdvisories/ucm111313.htm>. Accessed 8-14-11

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SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB14: INJECTABLE MEDICATION ADMINISTRATION

Purpose

To administer medications via subcutaneous, intradermal and intramuscular routes in a safe, accurate, and effective manner.

Equipment Required

- A. Medication, reconstituted if appropriate.
- B. Sterile syringe capable of holding the medication volume.
- C. Sterile safety needle (Determine appropriate needle size for intramuscular administration depending on the size of the resident and viscosity of the medication).
- D. Alcohol wipes.
- E. Examination gloves.
- F. Barrier (e.g., disposable tray or plastic cup), if supplies or medication will be set down in resident's room.
- G. Medication Administration Record (MAR).

Sites for Administration

Intradermal

3-4 fingerwidths below the antecubital fossa (antecubital space) on either arm

Subcutaneous

Abdomen (minimally 2" below and left or right of umbilicus for heparins)

Upper arm - Fatty tissue over triceps

Top of thigh - Fatty tissue over anterolateral thigh

Intramuscular

Ventrogluteal (front of hip area). (Used for Deep IM and Z-track)

Deltoid (arms).

Dorsogluteal (back buttock).

Vastus lateralis (upper lateral area of leg).

Rectus femoris (medial upper leg).

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

Procedures

Procedure	Intradermal	Subcutaneous	Intramuscular	NOTES
Check order on the medication administration record to see that an injection is currently ordered and due. Close or secure the MAR to keep others from viewing it.	X	X	X	
Prepare the resident; verify identity, check for allergies.	X	X	X	INTRADERMAL: for tuberculin skin test (Mantoux technique), inquire if resident or staff member has ever had a POSITIVE skin test. If so, withhold test and contact MD. INTRAMUSCULAR: For vaccines, consent must be obtained. Take resident baseline TEMP prior to vaccination.
Wash hands with soap and water.	X	X	X	
Prepare medication – check refrigerator temp, assure label is attached, check expiration date, check vial for cracks, check that stopper is intact, check contents for discoloration, precipitation, or other unusual appearance.	X	X	X	Write DATE OPENED and EXPIRATION DATE on container if new vial used. Refer to table of shortened expiration dates for expiration date to use. INTRAMUSCULAR: Confirm type of IM injection needed – regular depth, deep IM, or Z-track.
Check 5 rights as medication selected is checked against order.	X	X	X	
Gather supplies – safety syringe of appropriate volume and with proper needle for the type of injection, gloves, alcohol wipes, bandage, gauze pads, and barrier.	X	X	X	See “WHAT NEEDLE TO USE” chart below.

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Procedure	Intradermal	Subcutaneous	Intramuscular	NOTES
Check 5 rights again as dose is prepared.	X	X	X	
Clean stopper with alcohol pad and allow to air dry (Except on pen devices and pre-filled syringes).	X	X	X	Roll insulin and other suspensions gently to mix and warm.
With the bevel of the needle pointing up, inject a volume of air equal to the volume of the dose into the vial and withdraw the medication; create air lock. Do not recap needles. (Except on pen devices and pre-filled syringes)	X	X	X	If mixing insulins in same syringe, always draw clear insulin first, or if both clear, draw faster-acting one first. PEN DEVICES: Dial dose as instructed by pen manufacturer
Remove air bubbles.	X	X	X	VanishPoint syringes may retain a small air bubble which is not removable, but is not injected.
Check 5 rights again after dose is prepared and before med is put away and injection administered.	X	X	X	
Sanitize hands with approved sanitizer.	X	X	X	
Bring supplies to bedside or beside resident and maintain a clean space.	X	X	X	
Provide privacy, explain procedure so resident knows what to expect.	X	X	X	
Put on gloves.	X	X	X	
Expose the area to be injected and clean with an alcohol wipe.	X	X	X	1. See injection sites table above. 2. Clean in a circular motion, spiraling out from the center.

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Procedure	Intradermal	Subcutaneous	Intramuscular	NOTES
Prepare skin for injection:	Pull skin taught and flat between thumb & forefinger	Pinch skin up between thumb & forefinger	Tap area gently to desensitize	INTRAMUSCULAR: See “Z-Track method below for certain medications such as Haldol, Compazine, Iron, others.
Remove air from syringe and insert the needle:	5°-15° angle to skin, insert tip about 1/8 inch	45°-90° angle to skin, depending on thickness	90° angle to skin	INTRAMUSCULAR: See “Z-Track method below for certain medications such as Haldol, Compazine, Iron, others.
Pull back to check for blood.	NO	X	X	
Inject medication.	Wheal will form	Inject slowly	Inject slowly	INTRAMUSCULAR: See “Z-Track method below for certain medications such as Haldol, Compazine, Iron, others.
Remove needle at same angle	X	X	X	Some syringes require additional pressure to retract needle back into barrel (e.g., VanishPoint).
Apply gentle pressure to the site.	NO	X	X	
Apply adhesive bandage if needed and observe site for unusual reaction.	NO bandage	NO bandage	X	
Dispose of syringe in sharps container and supplies in appropriate waste container.	X	X	X	
Remove & discard gloves. Clean hands by washing or using sanitizer.	X	X	X	
Document administration, site used and any unusual reactions. Notify physician if reactions occur.	X	X	X	VACCINES: Document baseline temperature taken earlier.
Return vial(s) to storage.	X	X	X	

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Z-TRACK TECHNIQUE:

If Z-track technique is required [e.g., for: haloperidol (Haldol®), prochlorperazine (Compazine®), fluphenazine (Prolixin®), hydroxyzine pamoate (Vistaril®), iron dextran (Imferon®), others], use the following procedure:

- 1) Rest the side of the non-dominant hand just to the left or right of the chosen site in the ventrogluteal region.
- 2) Use this hand to stretch the skin to the left or to the right and hold the skin in that place while injecting the needle. Follow the steps below.
 - A. Using the other hand to hold the syringe, insert the needle at a 90-degree angle; use a quick, dart-like thrust.
 - B. Stabilize the syringe with the non-dominant hand.
 - C. Place the thumb of the dominant hand on the plunger and the index and middle fingers under the hook of the syringe barrel.
 - D. Hold the needle steady and inject the medication at a slow, even rate.
 - E. Push the plunger into the syringe barrel with a slow, continuous downward movement as far as the plunger will go.
 - 1) Z-TRACK TECHNIQUE:
 - a. HOLD SKIN IN PLACE FOR 10 SECONDS to allow irritating medication to move away from the tip of the needle to prevent irritation or damage to skin as needle is removed.
 - b. Z-TRACK TECHNIQUE: release the stretched skin being held through the injection with the non-dominant hand.
 - F. Withdrawing Needle:
 - 1) Place the alcohol pad you are holding just above the injection site with the non-dominant hand.
 - 2) Remove the needle straight out in same direction as the injection with a quick, outward motion. Withdraw needle rapidly.
 - G. Swab the area with an alcohol wipe in a circular motion.
 - H. Massage Injection Site. Rub the injection site with the alcohol pad with a firm, circular motion for about 5 seconds. Massaging helps to disperse the medication so that it can be absorbed more quickly.
 - I. Cover injection site. Place an adhesive bandage over the injection site to protect clothes from possible bloodstains and protect the injection site from possible infection.
 - J. Discard syringe and needle in designated area. Do not recap needle.
 - K. Remove and discard gloves. Wash hands thoroughly with antimicrobial soap and water or facility-approved hand sanitizer.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

- L. Document the injection on the MAR along with site used, as follows, or per facility policy:

SITE	CODE
Left Buttock	LB
Right Buttock	RB
Left Arm	LA
Right Arm	RA
Left Thigh	LT
Right Thigh	RT

What needle to use?	Length	Gauge	Max Volume per site
Subcutaneous	5/8 " needle	25 gauge	(max amount: up to 1cc)
PEN Needles	8 - 12.7mm	29-31 GA	
Intradermal	3/8 – 5/8" needle	26 –27 gauges	(amounts: tenths of a cc)
Intramuscular	1 ¼ - 1 ½" needle	22 gauge	(max amount: up to 3cc) (divide volume in half & use second site for larger volumes)

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

IIB15: TOPICAL MEDICATION ADMINISTRATION

Purpose

To administer topical medications in a safe, accurate, and effective manner.

Equipment Required

- A. Medication or Treatment Cart (if medications and treatments are stored in a central location) with medications or treatments.
- B. Refrigerated items (if applicable).
- C. Examination gloves (sterile or non-sterile, depending on nature of resident's skin condition).
- D. Barrier (e.g., disposable tray or plastic cup).
- E. Medication Administration Record (MAR) or Treatment Administration Record (TAR).
- F. Other necessary equipment may include: gauze, tongue depressor, cotton-tip applicator, paper applicator, tape, peroxide, normal saline, bandages, scissors, tissue or paper towel.
- G. Facility-approved hand sanitizer.
- H. Waste receptacle.
- I. Drug reference (available in facility).

Procedures

For general guidelines on medication administration, refer to IIA1: EQUIPMENT AND SUPPLIES FOR ADMINISTERING MEDICATIONS and IIA2 MEDICATION ADMINISTRATION-GENERAL GUIDELINES.

- A. Review and confirm medication orders for each individual resident on the Medication Administration Record or Treatment Administration Record PRIOR to administering medications to each resident.
- B. Provide privacy as necessary.
- C. Position resident comfortably.
- D. Wash hands.
- E. Put on examination gloves.
- F. Place bed cover pad under affected area if applicable.
- G. Prepare items and hang cuffed plastic bag for waste, or other appropriate waste receptacle at the end of the overbed table.

SPECIFIC MEDICATION ADMINISTRATION PROCEDURES

- H. Examine resident's skin for exudate or residue from previous treatment applications. If any, remove dressing and cleanse or irrigate the area with saline or other solutions per physician's order.
- I. Discard previous dressing into plastic bag, if applicable. Change gloves.
- J. If needed, choose an appropriate applicator to remove medication/treatment from the container. Once used, applicator is never reintroduced into the container.
- K. Apply topical treatment (medication and dressing if indicated) as per physician's order. To avoid contamination of a product, do not let the medication tube or tip touch the resident's skin.
 - 1) If administering Nitroglycerin ointment, squeeze the ointment onto a calibrated ointment pad in a manner to produce an even ribbon. Avoid getting Nitroglycerin on hands as it can cause a headache.
- L. When possible, rotate sites of application to prevent skin irritation. Sites of administration should be noted on the appropriate Administration record.
- M. In general, topical products should be applied sparingly unless otherwise ordered.
- N. If a product might drip, use a clean paper towel or pad to protect the resident's clothing and/or bedding.
- O. If resident has multiple treatment sites, the cleanest site is treated first (e.g. leg before buttocks) and each site is treated as a separate dressing.
- P. Remove gloves and discard into plastic waste bag or other appropriate waste receptacle.
- Q. Reposition and cover resident.
- R. Discard all used, disposable equipment into the plastic bag or other appropriate waste receptacle.
- S. Place hands under cuff of bag and close.
- T. Wash hands thoroughly with antimicrobial soap and water or facility-approved hand sanitizer.
- U. Dispose of bag in red bag container in soiled utility area.
- V. Note administration of the treatment by recording initials, date and time in the appropriate area on the Medication Administration Record or Treatment Administration Record. If the administration site is rotated, (e.g. Nitroglycerin ointment), record site on Medication Administration Record or Treatment Administration Record.
- W. Document changes in wound condition in the resident's medical record.

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